

**REMARKS:**

Claims 2 and 15-17 are in the case and presented for consideration.

Method claims 18-21 have been canceled, subject to Applicant's right to file a divisional application anytime before the present application is issued as a patent or abandoned. Claim 17 has been corrected to properly depend from claim 2. Claim 1 has been canceled and claim 2 has been amended to eliminate compounds disclosed in the Bressi et al. article.

Turning to the action, this amendment is being filed with an RCE in view of the fact that this is an amendment after final rejection.

The Applicants thank the Examiner for the indication that various formal and other non-art based rejections have been overcome.

The Examiner rejects claims 1 and 2 as being fully anticipated by the Bressi et al. article, however, and rejects claims 15-17 on the same basis.

It is noted that claim 2, which has been amended to be an independent claim and to eliminate the compounds as noted above, has also been amended to include its pharmaceutically acceptable salts. Claim 17 has also been amended to define the composition including a pharmaceutical carrier making it suitable as a mitotic or anti-mitotic compound, which is believed to further limit claim 2.

The Examiner refers to the previous office action, where he stated that the compounds meeting the limitations of the current claims are compounds 44a-59a and 44b-59b. The Applicants would like to point out that these compounds are substituted phenethyladenosines, i.e., they contain one bridging methylene group more than the claimed compounds and they do not meet the limitations of the claims as filed. The

compounds meeting the limitations of the claims as filed are compounds 29a-36a and 29b-36b, however, the claims have now been amended so that these compounds are excluded. This is believed to overcome the rejection based on Bressi et al.

The compounds 29a-36a and 29b-36b were (with the exception of the compound 30b) inactive at the maximum concentration of  $4 \cdot 10^{-3}$  M in the biological testing of the inhibition of *T. brucei* PGK, while the claimed compounds were tested at concentrations of  $10^{-4}$  to  $10^{-8}$  M (several order of magnitude lower, therefore these compounds are much more effective) for other biological activities. The Bressi et al. authors recommend using substituted phenethyladenosines, which have shown higher activities. Thus, the article by Bressi et al. would lead a person skilled in the art to using phenethyladenosines. In addition to this, the results of the testing carried out in the cited article are questionable, because of the use of a high concentration of DMSO-d<sub>6</sub> in the inhibition studies (5 % DMSO). DMSO should be used in the final concentrations in the assays lower than 0.2 %, because DMSO possesses an inhibition activity for cell cultures and enzymes, which in the concentrations higher than 2 % affects the results of biological tests strongly (see, e.g. Hellman A., Farrelly J.G., Martin D.H., *Nature*, March 11, 1967, pp. 982-985, Table 1, or Forman S. et al., *J. Biochem. Molecular Toxicology*, Vol. 13, 1999, pp. 11-15). In the examples of the present application, see e.g. examples 12-14, the DMSO final concentration is kept at 0.2 % or lower. Thus, the article by Bressi et al. presents questionable results and furthermore, it would lead a person skilled in the art to using phenethyladenosines as claimed.

By this amendment, thus, the application and claim are believed to be in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

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Dated: December 26, 2007

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